

REMARKS

This Amendment is filed in response to the Office Action dated May 9, 2006. For the following reasons this application should be allowed and the case passed to issue. No new matter is introduced by this amendment. The amendments to claims 3, 5, and 14 are supported throughout the specification, including page 8, lines 5-19.

Claims 1-14 are pending in this application. Claims 1 and 2 are withdrawn from consideration, pursuant to a restriction requirement. Claims 3-14 have been rejected. Claims 3, 5, and 14 have been amended.

Restriction

The restriction requirement is traversed, and reconsideration and withdrawal thereof respectfully requested. The Examiner maintained the erroneous characterization of Group I and Group II as being in an intermediate-final product relationship. The correct relationship is a subcombination-combination, which requires two-way distinctness to restrict, and the Examiner has only shown one-way distinctness. As explained in the MPEP § 806.04(b), typically the intermediate loses its identity in the final product. However, in the instant claims, the battery packaging laminate sheet of Group I, does not lose its identity in the final product of Group II, the battery element internally sealed in a laminate sheet. Groups I and II are clearly not related as intermediate-final product. Thus, reconsideration of the restriction requirement is respectfully requested.

Claim Rejections Under 35 U.S.C. § 102

Claims 3-11, 13, and 14 are rejected under 35 U.S.C. § 102(b) as being anticipated by Takahashi et al. (U.S. Pat. Pub. No. 2001/0038938). This rejection is traversed, and

reconsideration and withdrawal thereof respectfully requested. The following is a comparison between the invention as claimed and the cited prior art.

An aspect of the invention, per claim 3, is a battery element internally sealed in a laminate sheet provided with a thermally welding resin layer and a metallic layer laminated thereon comprising an electric power generating element and a tab. The tab is formed with a thermally welding resin layer which is thermally welded with a thermally welding resin layer of a laminate sheet and connected to the electric power generating element with an amount of resin allowing an amount of resin, to be pushed outside the tab, to be compensated.

Another aspect of the invention, per claim 5, is a laminate battery comprising a tab and an electric power generating element connected to the tab. A laminate sheet allows the electric power generating element to be accommodated. The laminate sheet has a metallic layer and a thermally welding resin layer laminated on the metallic layer. The tab and the thermally welding resin layer are welded by permitting a thermally welding area, which is formed in at least one of the thermally welding resin layer and the tab, and the other of the thermally welding resin layer and the tab to be welded to one another with an amount of resin allowing an amount of resin, to be pushed outside the tab, to be compensated.

Another aspect of the invention, per claim 14, is a method of manufacturing a laminate battery comprising preparing a tab and an electric power generating element connected to the tab. A laminate sheet having a metallic layer and a thermally welding resin layer laminated on the metallic layer is prepared. The tab and the thermally welding resin layer are welded, such that a thermally welding area formed in at least one of the thermally welding layer and the tab is welded to the other of the thermally welding layer and the tab with an amount of resin allowing

an amount of resin, to be pushed outside the tab, to be compensated, while permitting the electric power generating element to be accommodated in the laminate sheet.

The Examiner asserted that Takahashi et al. disclose an electrochemical element sealed in a laminate sheet provided with a thermally welded resin layer and a metallic layer laminated thereon comprising: an electric power generating element (10) being sealed in an envelope (30) with terminal tabs (13, 14) extending out of the envelope (20).

Takahashi et al. do not anticipate the claimed battery element internally sealed in a laminated sheet, laminate battery, or method of manufacturing a laminate battery, as required by claims 3, 5, and 14, respectively, because Takahashi et al. do not disclose a tab formed with a thermally welding resin layer which is thermally welded with a thermally welding resin layer of a laminate sheet and connected to the electric power generating element **with an amount of resin allowing an amount of resin, to be pushed outside the tab, to be compensated**, as required by claim 3; the tab and the thermally welding resin layer are welded by permitting a thermally welding area, which is formed in at least one of the thermally welding resin layer and the tab, and the other of the thermally welding resin layer and the tab to be welded to one another **with an amount of resin allowing an amount of resin, to be pushed outside the tab, to be compensated**, as required by claim 5; and welding the tab and the thermally welding resin layer, such that a thermally welding area formed in at least one of the thermally welding layer and the tab is welded to the other of the thermally welding layer and the tab **with an amount of resin allowing an amount of resin, to be pushed outside the tab, to be compensated**, while permitting the electric power generating element to be accommodated in the laminate sheet, as required by claim 14.

The present invention enables the proper distance between the tab and the metallic layer of the laminate sheet to be ensured, and also suppresses to a minimum degradation of battery characteristics (see written description, page 2, line 29 to page 3, line 4).

Takahashi et al., on the other hand, disclose an electrochemical device having an electrochemical element (10) sealed in a bag-like envelope (20). More specifically, as shown in Figs. 8 and 9, Takahashi et al. teach that the electrochemical device has a stack of positive electrode layers (204), electrolyte layers (205), negative electrode layers (206), such a stack is sealed in the envelope (202) with the external electrode or out-lead (203) extending out of the envelope (202). The open ends of the envelope (202) with the external electrode (203) sandwiched therebetween are joined only by the thermal fusion to form the seal portion (207), and the external electrode or out-lead (203) is secured to the top side of the envelope (202) by only the adhesive layer (208), while the lowermost internal or positive electrode (204) is secured to the bottom side of the envelope (202) by only the adhesive layer (209). Takahashi et al. do not disclose that a tab is formed with the thermally welding resin layer which is thermally welded with the thermally welding resin layer of the laminate sheet and connected to the electric power generating element with the amount of resin allowing the amount of resin, to be pushed outside by the tab, to be compensated. Takahashi et al. further do not disclose that the tab and the thermally welding resin layer are welded by permitting the thermally welding area, which is formed in at least one of thermally welding resin layer and the tab, and the other of the thermally welding resin layer and the tab to be welded to one another with the amount of the resin allowing the amount of resin, to be pushed outside by the tab, to be compensated, as substantially defined in the specific structure of the present invention. Claims 3, 5, and 14 are, therefore, not disclosed by Takahashi et al.

The factual determination of lack of novelty under 35 U.S.C. § 102 requires the disclosure in a single reference of each element of a claimed invention. *Helifix Ltd. v. Blok-Lok Ltd.*, 208 F.3d 1339, 54 USPQ2d 1299 (Fed. Cir. 2000); *Electro Medical Systems S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 32 USPQ2d 1017 (Fed. Cir. 1994); *Hoover Group, Inc. v. Custom Metalcraft, Inc.*, 66 F.3d 399, 36 USPQ2d 1101 (Fed. Cir. 1995); *Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 24 USPQ2d 1321 (Fed. Cir. 1992); *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051 (Fed. Cir. 1987). Because Takahashi et al. do not disclose a tab formed with a thermally welding resin layer which is thermally welded with a thermally welding resin layer of a laminate sheet and connected to the electric power generating element **with an amount of resin allowing an amount of resin, to be pushed outside the tab, to be compensated**, as required by claim 3; the tab and the thermally welding resin layer are welded by permitting a thermally welding area, which is formed in at least one of the thermally welding resin layer and the tab, and the other of the thermally welding resin layer and the tab to be welded to one another **with an amount of resin allowing an amount of resin, to be pushed outside the tab, to be compensated**, as required by claim 5; and welding the tab and the thermally welding resin layer, such that a thermally welding area formed in at least one of the thermally welding layer and the tab is welded to the other of the thermally welding layer and the tab **with an amount of resin allowing an amount of resin, to be pushed outside the tab, to be compensated**, while permitting the electric power generating element to be accommodated in the laminate sheet, as required by claim 14, Takahashi et al. do not anticipate claims 3, 5, and 14.

Applicants further submit that Takahashi does not suggest the claimed battery element internally sealed in a laminate sheet, laminate battery, and method of manufacturing a laminate battery.

Claim Rejections Under 35 U.S.C. § 103

Claim 12 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Takahashi et al. in view of Watanabe et al. (U.S. Pat. No. 6,692,866). This rejection is traversed, and reconsideration and withdrawal thereof respectfully requested. The following is a comparison between the invention as claimed and the cited prior art.

Takahashi et al. and Watanabe et al., whether taken alone or in combination, do not suggest the claimed laminate battery because Watanabe et al. do not cure the deficiencies of Takahashi et al. Watanabe et al. do not suggest the tab and the thermally welding resin layer are welded by permitting a thermally welding area, which is formed in at least one of the thermally welding resin layer and the tab, and the other of the thermally welding resin layer and the tab to be welded to one another **with an amount of resin allowing an amount of resin, to be pushed outside the tab, to be compensated**, as required by claim 5. Thus, claim 12 is allowable for at least the same reasons as claim 5.

Claim 12 is further distinguishable over the combination of Takahashi et al. and Watanabe et al. because Watanabe et al. do not disclose the claimed relationship between the cross sectional areas of the positive electrode and negative electrode tabs.

The dependent claims are allowable for at least the same reasons as the respective independent claims from which they depend and further distinguish the claimed battery element internally sealed in a laminate sheet and laminate battery.

Application No.: 10/659,257

In light of the above Amendment and Remarks, this application should be allowed and the case passed to issue. If there are any questions regarding these remarks or the application in general, a telephone call to the undersigned would be appreciated to expedite prosecution of the application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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